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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,051	07/30/2003	Steve Gronemeyer	ST02009CIP	9974

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EXAMINER

NGUYEN, DUC M

ART UNIT PAPER NUMBER

2618

DATE MAILED: 05/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/632,051	Applicant(s) GRONEMEYER ET AL.	
	Examiner Duc M. Nguyen	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 22-33 is/are rejected.
- 7) ☒ Claim(s) 21 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on ____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/16/05 & 10/22/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Information Disclosure Statement

1. The references listed in the information disclosure statements submitted on 10/22/04 and 5/16/05 have been considered by the examiner (see attached PTO-1449).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims **1-3, 5-12** are rejected under 35 U.S.C. 102(e) as being anticipated by **Kerth et al** (US 2002/0132648).

Regarding claim **1**, **Kerth** discloses a radio frequency (RF) to baseband interface providing power control over an R.F section that processes RF signals and that is

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coupled to a baseband section that processes baseband signals, the interface comprising:

- a bi-directional message interface for communicating a power control message from the baseband section to the RF section (see Figs. 9-10, paragraphs [0094]-[0095] and [0103]-[0105]); and
- a data interface for communicating data from the RF section to the baseband section (see paragraphs [0108]-[0111]).

Regarding claims **2, 8, 11**, **Kerth** discloses the power control message comprises a power control bit specifying a power state for pre-selected circuitry in the RF section (see [0094], [0095]) regarding logic low or high of PDNB).

Regarding claims **3, 12**, **Kerth** discloses the power state is one of a power-up state (normal mode, see [0095]) and a power-down state (standby mode, see [0094]).

Regarding claim **5**, **Kerth** discloses the pre-selected circuitry is at least one of a frequency divider, oscillator, and amplifier (see [0096] regarding disable transmitter circuitry which would include at least one amplifier or oscillator as claimed).

Regarding claims **6, 9**, **Kerth** discloses the message interface is a serial message interface (see [0094]).

Regarding claims **7, 10**, **Kerth** discloses the message interface comprises a message-in signal line, a message-out signal line and a message clock signal line (see [0094] regarding data-in, data-out and serial clock).

4. Claim **13** is rejected under 35 U.S.C. 102(e) as being anticipated by **Molnar et al** (US 2002/0142741).

Regarding claim **13**, **Kerth** discloses a method for controlling power in a radio frequency (RF) section that processes RF signals and that is coupled to a baseband section that processes baseband signals, the method comprising the steps of:

setting a power control bit (low or high) in a power control message (see Fig. 3 and [0047]); and

communicating the power control message over a message interface from the baseband section to the RF section (see [0057]-[0060]).

where the step of setting comprises the step of setting a plurality of power control bits (see [0072]) individually specifying power states for a plurality of pre-selected circuitry in the RF section [see [070],[071] and [0072)].

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims **4**, **13** are rejected under 35 U.S.C. 103(a) as being unpatentable by **Kerth** in view of **Molnar** (US 2002/0142741).

Regarding claim **4, 13, Kerth** fails to disclose a plurality of power control bits individually specifying power states for a plurality of pre-selected circuitry in the RF section. However, in an analogous art, **Molnar** discloses a plurality of power control bits (see [0072]) individually specifying power states for a plurality of pre-selected circuitry in the RF section (see [070], [071]). Therefore, one of ordinary skill in the art would recognize the benefit of individually specifying power states for a plurality of pre-selected circuitry in the RF section in Molnar, for incorporating Molnar's teaching to Kerth to provide a plurality of power control bits as claimed, for further improving to maximizing the amount of power saving.

7. Claims **14-20, 22-33** are rejected under 35 U.S.C. 103(a) as being unpatentable by **Kerth** in view of **Syrjarinne et al** (US 2003/0107514).

Regarding claim **14, Kerth** fails to disclose a GPS receiver. **Syrjarinne** discloses a GPS receiver (see Abstract). Since incorporate a GPS receiver in a mobile phone is well known in the art (see **Syrjarinne**, [0013]), it would have been obvious to one skilled in the art at the time the invention was made to further incorporate **Syrjarinne's** GPS receiver in **Kerth's** receiver circuit as well. Since **Syrjarinne** and **Kerth** both suggests a low power standby mode (power down) for power saving, it is clear that the power control signal utilizing serial interface in **Kerth** would applicable to a GPS receiver and would work equally well for saving power. In an alternative way, it would have been obvious to one skilled in the art at the time the invention was made to incorporate the baseband serial interface in Kerth to the GPS receiver in **Syrjarinne** as

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well and would work equally well for controlling power consumption of the RF section. Therefore, the claimed limitation regarding a GPS receiver is made obvious by **Kerth** and **Syrjarinne**.

Regarding claim **15**, **Kerth** discloses the message interface comprises a message-in signal line, a message-out signal line and a message clock signal line (see [0094] regarding data-in, data-out and serial clock).

Regarding claim **16**, **Kerth** discloses the power control message comprises a power control bit specifying a power state for pre-selected circuitry in the RF section (see [0094], [0095]) regarding logic low or high of PDNB).

Regarding claim **17**, **Kerth** discloses the power state is one of a power-up state (normal mode, see [0095]) and a power-down state (standby mode, see [0094]).

Regarding claim **18**, since **Syrjarinne** discloses a plurality of power control bits individually specifying power states for a plurality of pre-selected circuitry in the RF section (see [0014], [0037], [0039] through [0042]), one of ordinary skill in the art would recognize the benefit of individually specifying power states for a plurality of pre-selected circuitry in the RF section in **Syrjarinne**, for incorporating **Syrjarinne**'s teaching to provide a plurality of power control bits as claimed, for further improving and maximizing the amount of power saving. Therefore, **Kerth** in view of **Syrjarinne** would disclose the power control message comprises a plurality of power control bits individually specifying power states for a plurality of pre-selected circuitry in the RF section as claimed.

Regarding claim **19**, **Kerth** discloses the pre-selected circuitry is at least one of a frequency divider, oscillator, and amplifier (see [0096] regarding disable transmitter circuitry which would include at least one amplifier or oscillator as claimed).

Regarding claim **20**, **Kerth** discloses the message interface is a serial message interface which would include a data clock signal line and data bit signal line (see Figs. 9-10 and [0094]).

Regarding claims **22-33**, the claims are interpreted and rejected for the same reason as set forth in claims 14-20 above, wherein it is clear that the baseband processing section in Kerth would obviously comprise at least one address, data, and control line for communicating with a digital device (DSP) as claimed (see [0032]).

Allowable Subject Matter

8. Claim 21 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Double Patenting

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir.

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1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims **1, 6-10, 14-15, 20-23, 28-29** are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-60 of copending Application No. 10/369853. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both direct to a GPS receiver with a baseband serial interface for controlling RF power section.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

11. Claims **2-5, 11-13, 16-19, 24-27, 30-33** are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-60 of copending Application No. **10/369,853** in view of **Syrjarinne et al** (US 2003/0107514).

Claims 1-60 of copending Application No. 10/369,853 discloses a GPS receiver which would include all the claimed limitations except for a plurality of power control bits individually specifying power states for a plurality of pre-selected circuitry in the RF section. However, **Syrjarinne** discloses a GPS receiver wherein **Syrjarinne** discloses a

plurality of power control bits individually specifying power states for a plurality of pre-selected circuitry in the RF section (see [0014], [0037], [0039] through [0042]).

Therefore, one of ordinary skill in the art would recognize the benefit of individually specifying power states for a plurality of pre-selected circuitry in the RF section in **Syrjarinne**, for incorporating **Syrjarinne**'s teaching to 10/369,853 to provide a plurality of power control bits as claimed, for further improving to maximizing the amount of power saving. Therefore, 10/369,853 in view of **Syrjarinne** would disclose the power control message comprises a plurality of power control bits individually specifying power states for a plurality of pre-selected circuitry in the RF section.

This is a provisional obviousness-type double patenting rejection.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gunzelmann et al (US 2004/0097250),

Lau et al (US 5,592,173),

Krasner (US 6,133, 871),

Li et al (US 2002/0160734),

Najarian et al (US 2004/0042563) and

Washakowshi (US 2005/0238117).

13. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(571) 273-8300 (for **formal** communications intended for entry)

(571)-273-7893 (for informal or **draft** communications).

Hand-delivered responses should be brought to Customer Service Window,
Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

Any inquiry concerning this communication or communications from the examiner
should be directed to Duc M. Nguyen whose telephone number is (571) 272-7893,
Monday-Thursday (9:00 AM - 5:00 PM).

Or to Matthew Anderson (Supervisor) whose telephone number is (571) 272-
4177.

Duc M. Nguyen, P.E.

May 18, 2006

A handwritten signature in black ink, appearing to read 'Duc M. Nguyen', with a long horizontal flourish extending to the right.